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EIGHTH QUARTERLY (TYPE II) PROGRESS REPORT CR-153974

Project Title: Development of a Multi-disciplinary ERTS User Program in the State of Ohio Ref. 20900

Contract Number: NAS5-22399

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Section A - Problems

1. Statewide Land Use Inventory - Meeting with Bendix indicated most problems are matter of rework and not too difficult to solve. Tapes were returned to Bendix and U.S.G.S. Quad Maps to check ground control points where geometric correction was problem. We are now waiting on corrected Bendix product.

2. Socio-economic merging with Landsat Data - Work completed

3. Service Development - Work completed

Section B - Accomplishments

1. Statewide Land Use Inventory - A DNR verification study is now 95% complete. Preliminary results on an overall statewide basis using the DNR methodology indicated an accuracy level of 80%. Study of intercategory relationship is being made also. Data sent to one of the participating Regional Planning and Development Organization (RPDO) NEFCO is showing a much lower level in their preliminary results. The NEFCO results are being obtained using a very stringent point by point methodology. Intercategory relationships are also being studied. The File Management System is now 95% complete and output statistics are now available from the initial Land Use product that could be used.

2. Socio-economic merging with Landsat Data - The Land Use Change Data obtained by comparison of 1973 and 1975 Landsat derived Land use data was produced and analysis of the errors produced from misalignment and misclassification of Land use was completed. Regression analysis of the land use and other socio-economic data to generate models of the relationships between Land use and factors such as population density, employment was accomplished. Analysis of the results of the presently used methodology has been completed.

Section C - Significant Results

1. Statewide Land Use Inventory - none to report at this time.

2. Socio-economic merging with Landsat Data - Although the analysis of the results of presently used methodology has showed inadequate correlation between the Land use change and the various socio-economic factors, a system of analysis has been produced that will aid in the future work in this area pointing out the adequacy of the land use data for producing models of the desired accuracy. This testing methodology should be applicable to other Landsat/land use interpretation systems. When the land use change data becomes adequate the knowledge of the modeling effort can be applied to plug it into a powerful planning tool to project land use along with other socio-economic variables.

3. Service Development - work completed.

Section D - Publications

1. None.

Section E - Recommendations

1. It now seems that the delays have again made it advisable to request a no cost extension for reporting.

Section F - Aircraft Data

1. None.